

Scheme 4 be deleted from page 30; Scheme 6 be deleted from page 33; Scheme 8 be deleted from page 35; Scheme 9 be deleted from page 39; and Scheme 10 be deleted from page 41.

In the Claims:

Please substitute amended claims 11, 24, and 29 as follows:

13 11. (once amended) The method of claim 8, wherein said desired protein is a derivative of a naturally isolatable protein that contains one or more variant residues that are not found in said naturally isolatable protein.

24 24. (twice amended) A synthetically produced protein of greater than about 35 amino acid residues, said protein having an intermediate conformation, wherein all of the residues of said protein are linked to adjacent residues via an amide bond, said protein being produced by the process of ligating together at least two oligopeptide fragments wherein:

- (1) said first oligopeptide fragment having a length of 30 or more amino acid residues with a C-terminal non- β -branched amino acid residue modified as a C-terminal thioester; and
- (2) said second oligopeptide fragment has an *N*-terminal cysteine having an unoxidized sulfhydryl side chain and a free amino group that is capable of forming a β -aminothioester linkage with said C-terminal thioester that rearranges to form an amide bond therein between; wherein said ligation results in the formation of an amide bond linking said first and second fragments, wherein said synthetically produced protein being a derivative